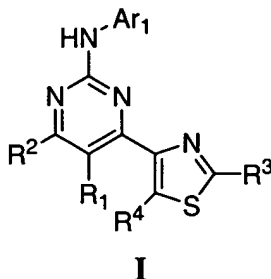


CLAIMS

1. A compound of formula (I):



or a pharmaceutically acceptable salt thereof, wherein:

R^1 and R^2 are each independently R, halogen, CN, NO₂, or TR, or R^1 and R^2 taken together form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5- or 6-membered ring having 0-3 heteroatoms independently selected from N, O, or S;

T is an optionally substituted C₁-C₄ alkylidene chain wherein up to two methylene units of T are optionally and independently replaced by O, N(R), C(O), S, SO, or SO₂;

Ar¹ is an optionally substituted ring selected from: an aryl group selected from a 5-6 membered monocyclic or an 8-10 membered bicyclic ring having 0-5 heteroatoms independently selected from nitrogen, oxygen, or sulfur; a 3-8-membered saturated or partially unsaturated monocyclic ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur; or an 8-10-membered saturated or partially unsaturated bicyclic ring system having 0-5 heteroatoms independently selected from nitrogen, oxygen, or sulfur; wherein Ar¹ is optionally substituted at one or more carbon atoms with 0-5 occurrences of -Q-R⁵, and at one or more substitutable nitrogen atoms with -R⁶ and each occurrence of R⁶ is independently R', -COR', -CO₂(C₁₋₆ aliphatic), -CON(R')₂, -SO₂N(R')₂, or -SO₂R';

R^3 and R^4 are each independently Z-R⁷;

each occurrence of Q and Z is independently a bond or an optionally substituted C₁-C₆ alkylidene chain wherein up to two non-adjacent methylene units of Q are optionally replaced by CO, CO₂, COCO, CONR, OCONR, NRNR, NRNRCO, NRCO, NRCO₂, NRCONR, SO, SO₂, NRSO₂, SO₂NR, NRSO₂NR, O, S, or NR;

each occurrence of R^5 and R^7 is independently R' , halogen, NO_2 , CN , OR' , SR' , $N(R')_2$, $NR'C(O)R'$, $NR'C(O)N(R')_2$, $NR'CO_2R'$, $C(O)R'$, CO_2R' , $OC(O)R'$, $C(O)N(R')_2$, $OC(O)N(R')_2$, SOR' , SO_2R' , $SO_2N(R')_2$, $NR'SO_2R'$, $NR'SO_2N(R')_2$, $PO(OR')_2$, $C(O)C(O)R'$, or $C(O)CH_2C(O)R'$; and

each occurrence of R is independently hydrogen or an optionally substituted C_{1-6} aliphatic group; and each occurrence of R' is independently hydrogen or an optionally substituted group selected from C_{1-8} aliphatic, C_{6-10} aryl, a heteroaryl ring having 5-10 ring atoms, or a heterocyclyl ring having 3-10 ring atoms, or wherein two occurrences of R taken together, R and R' taken together, or two occurrences of R' taken together, form an optionally substituted saturated, partially unsaturated, or fully unsaturated 3-8 membered ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur;

provided that :

when R^1 and R^2 are both hydrogen, R^3 is hydrogen, R^4 is CN , or

when R^1 and R^2 are both hydrogen, R^3 is NH_2 , R^4 is CN ,

then Ar^1 is not phenyl or pyridyl substituted with one or two occurrences of Cl , Me , CH_2NRR' , $C(O)NRR'$, or SO_2NRR' , wherein R and R' taken together form an optionally substituted saturated 6- or 7-membered ring having 1 or 2 heteroatoms independently selected from nitrogen or oxygen.

2. The compound of claim 1, wherein Ar^1 are optionally substituted rings selected from:

(a) a phenyl, indanyl, or naphthyl ring;

(b) a 5-6 membered heterocyclic ring having 1-3 heteroatoms independently

selected from nitrogen, oxygen, or sulfur; or

(c) a 5-6 membered monocyclic or 9-10 membered bicyclic heteroaryl ring having 1-3 heteroatoms independently selected from oxygen, nitrogen, or sulfur.

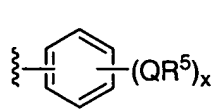
3. The compound of claim 1, wherein Ar^1 are optionally substituted rings selected from:

(a) a phenyl ring;

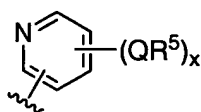
(b) a 5-6 membered heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur; or

- (c) a 5-6 membered monocyclic heteroaryl ring having 1-3 heteroatoms independently selected from oxygen, nitrogen, or sulfur.

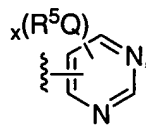
4. The compound of claim 1, wherein Ar^1 is selected from any one of **a-bb**:



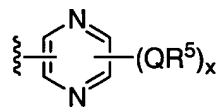
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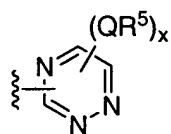
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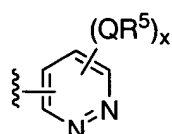
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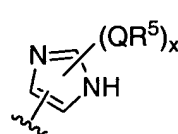
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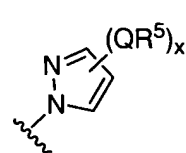
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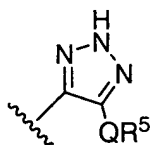
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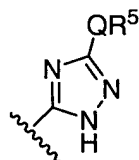
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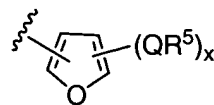
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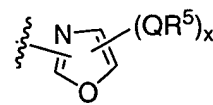
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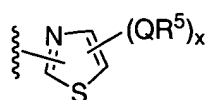
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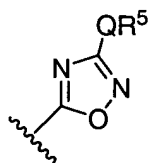
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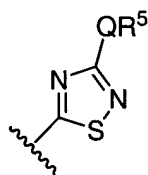
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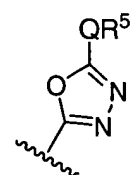
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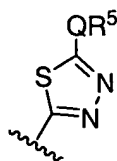
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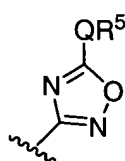
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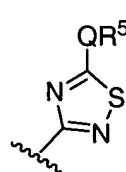
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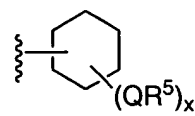
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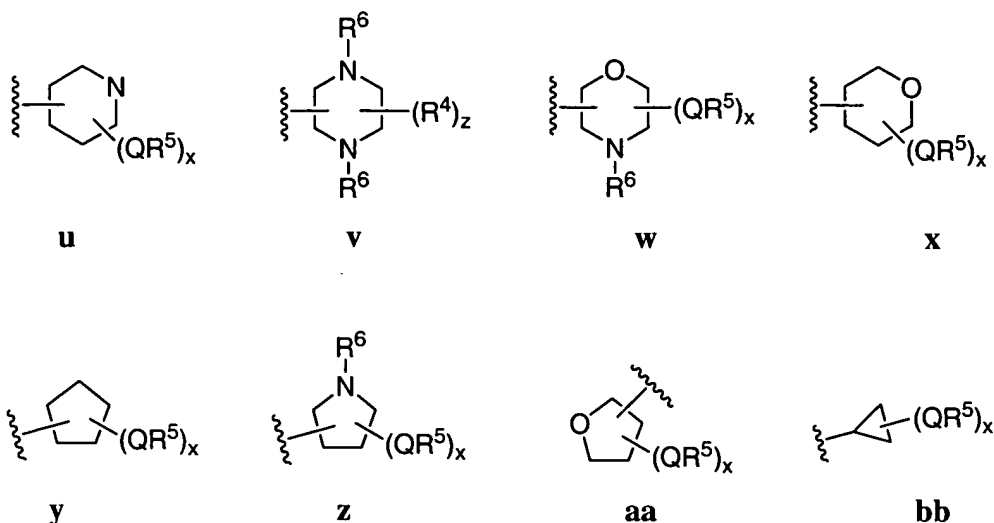
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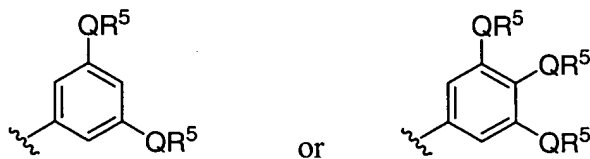


t



wherein x is 0-5.

5. The compound of claim 1, wherein Ar¹ is optionally substituted phenyl, pyrimidinyl, or pyridyl.
6. The compound of claim 1, wherein Ar¹ is phenyl and is substituted with two (x = 2) or three (x = 3) occurrences of Q-R⁵ and Ar¹ is:



wherein each occurrence of QR⁵ is independently CH₂halogen, halogen, CH₂CN, CN, CH₂CO₂R', CO₂R', CH₂COR', COR', R', CH₂NO₂, NO₂, CH₂OR', OR', CH₂SR', SR', haloalkyl, CH₂SO₂N(R')₂, SO₂N(R')₂, CH₂N(R')₂, N(R')₂, NHCOR', CH₂NHCOR', CH₂PO(OR')₂, PO(OR')₂.

7. The compound of claim 1, wherein Q is independently a bond or is an optionally substituted C₁-C₄ alkylidene chain wherein up to two non-adjacent methylene units of Q are optionally replaced by CO, CO₂, CONR, OCONR, NRCO, NRCO₂, NRSO₂, SO₂NR, O, S, or

NR; and each occurrence of R^5 is independently selected from R' , halogen, NO_2 , CN, OR' , SR' , $N(R')_2$, $NR'C(O)R'$, $NR'C(O)N(R')_2$, $NR'CO_2R'$, $C(O)R'$, CO_2R' , $OC(O)R'$, $C(O)N(R')_2$, $OC(O)N(R')_2$, SOR' , SO_2R' , $SO_2N(R')_2$, $NR'SO_2R'$, $NR'SO_2N(R')_2$, $PO(OR')_2$, $C(O)C(O)R'$, or $C(O)CH_2C(O)R'$, and x is 0, 1, 2, or 3.

8. The compound of claim 1, wherein $Q-R^5$ substituents on Ar^1 are CH_2 halogen, halogen, CH_2CN , CN, CH_2CO_2R' , CO_2R' , CH_2COR' , COR' , R' , CH_2NO_2 , NO_2 , CH_2OR' , OR' , CH_2SR' , SR' , haloalkyl, $CH_2SO_2N(R')_2$, $SO_2N(R')_2$, $CH_2N(R')_2$, $N(R')_2$, $NHCOR'$, CH_2NHCOR' , $CH_2PO(OR')_2$, $PO(OR')_2$, or two adjacent occurrences of $Q-R^5$, taken together with the atoms to which they are bound, form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5-8-membered ring having 0-3 heteroatoms selected from nitrogen, oxygen, or sulfur.

9. The compound of claim 1, wherein $Q-R^5$ substituents on Ar^1 are fluoro, iodo, chloro, bromo, $COCH_3$, CO_2CH_3 , C_{1-4} alkyl, NH_2 , CH_2NH_2 , $NHMe$, CH_2NHMe , $N(Me)_2$, $CH_2N(Me)_2$, $N(Et)_2$, $CH_2N(Et)_2$, $NH(phenyl)$, $CO(C_{1-4}alkyl)$, $CH_2CO(C_{1-4}alkyl)$, $NHCO(C_{1-4}alkyl)$, $CH_2NHCO(C_{1-4}alkyl)$, CN, CH_2CN , OH, C_{1-4} alkoxy, optionally substituted benzyloxy, optionally substituted phenyloxy, CF_3 , SO_2NH_2 , SO_2NHMe , optionally substituted $SO_2(phenyl)$, $SO_2(C_{1-4}alkyl)$, $CONH_2$, $CH_2PO(OR')_2$, or an optionally substituted group selected from a saturated, partially unsaturated, or fully unsaturated 5- or 6-membered ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur.

10. The compound of claim 1, wherein R^1 and R^2 groups of formula I are each independently hydrogen, $N(R)_2$, SR, OR, or TR, or R^1 and R^2 , taken together form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5-membered ring having 0-2 heteroatoms independently selected from N, O, or S.

11. The compound of claim 1, wherein R^1 and R^2 groups are each independently hydrogen, OH, CH_3 , CH_2CH_3 , OCH_3 , CH_2OH , CH_2OCH_3 , CH_2NH_2 , CH_2NHCH_3 , NH_2 , or CH_2NH_2 , or R^1 and R^2 , taken together, form a fused optionally substituted pyrrolyl, pyrazolyl, or imidazolyl ring.

12. The compound of claim 1, wherein R^3 and R^4 are each independently $Z-R^7$ wherein Z is an optionally substituted C_{0-4} alkylidene chain wherein one methylene unit of Z is optionally replaced by O, NR, NRCO, NRCO₂, NRSO₂, CONR, C(O), C(O)O, and wherein R^7 is selected from halogen, CN, $N(R')_2$, NHCOR', or R' , or wherein R^3 and R^4 , taken together form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5- or 6-membered ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur.

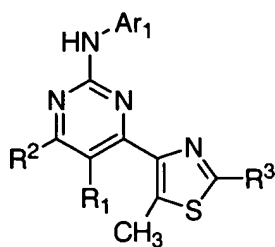
13. The compound of claim 1, wherein R^3 and R^4 are each independently hydrogen, CN, halogen, OH, SH, NH₂, CO₂H, COH, CONH₂, SO₂NH₂, NO₂, $(CH_2)_nNRR^7$, wherein R and R^7 , taken together with the nitrogen atom to which they are bound form an optionally substituted 3-8-membered saturated or partially unsaturated ring having 1-3 heteroatoms selected from nitrogen, oxygen, or sulfur, or R^3 and R^4 , taken together with the atoms to which they are bound, form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5- or 6-membered ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur, and n is 0, 1, 2, 3, 4, or 5.

14. The compound of claim 1, wherein one of R^3 or R^4 is hydrogen, and the other of R^3 or R^4 is $(CH_2)_n$ halogen, $(CH_2)_n$ CN, $(CH_2)_nOR^7$, $(CH_2)_nNRR^7$, $(CH_2)_nC(O)R^7$, $(CH_2)_nC(O)R^7$, $(CH_2)_nCH_3$, $(CH_2)_nC(O)NRR^7$, $(CH_2)_nSR^7$, wherein R^7 is hydrogen, $(CH_2)_mN(R')_2$, C_1 - C_4 alkyl, an optionally substituted 5- or 6-membered aryl, aralkyl, heteroaryl, or heteroaralkyl group, or R and R^7 , taken together with the nitrogen atom to which they are bound form an optionally substituted 3-8-membered saturated or partially unsaturated ring having 1-3 heteroatoms selected from nitrogen, oxygen, or sulfur.

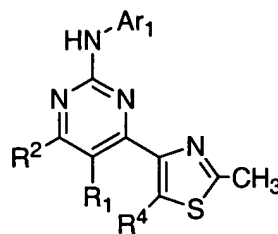
15. The compound of claim 14, wherein R^3 is hydrogen.

16. The compound of claim 14, wherein R^4 is hydrogen.

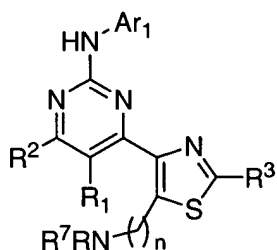
17. The compound of claim 1, having one of formulas **I-A-i**, **I-A-ii**, **I-B-i**, **I-B-ii**, **I-C-i**, **I-C-ii**, **I-D-i**, or **I-E-i**:



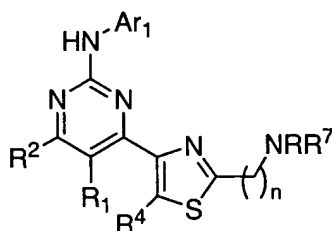
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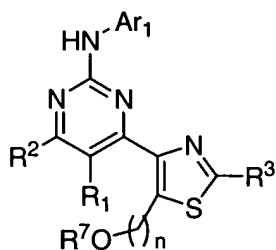
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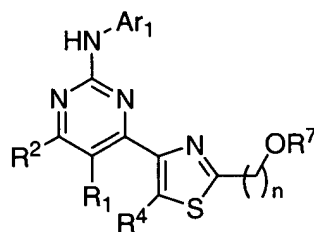
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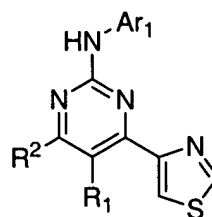
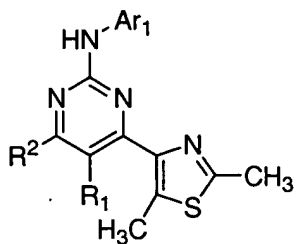
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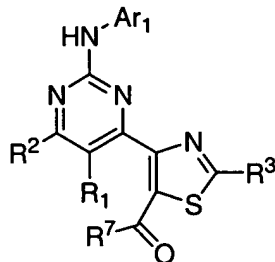
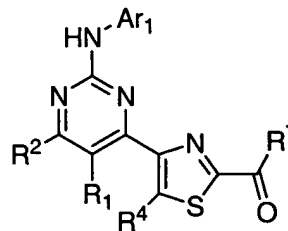


I-C-i

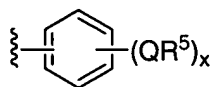
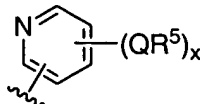
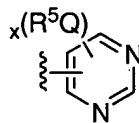
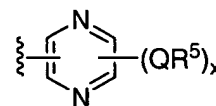


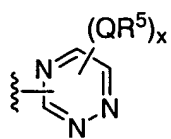
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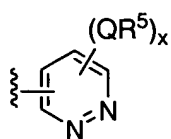
I-D-i**I-E-i****I-F-i****I-F-ii**

18. The compound of claim 17, wherein Ar¹ is:
- (a) a phenyl, indanyl, or naphthyl ring;
 - (b) a 5-6 membered heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur; or
 - (c) a 5-6 membered monocyclic or 9-10 membered bicyclic heteroaryl ring having 1-3 heteroatoms independently selected from oxygen, nitrogen, or sulfur.
19. The compound of claim 17, wherein Ar¹ is:
- (a) a phenyl ring;
 - (b) a 5-6 membered heterocyclic ring having 1-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur; or
 - (c) a 5-6 membered monocyclic heteroaryl ring having 1-3 heteroatoms independently selected from oxygen, nitrogen, or sulfur.
20. The compound of claim 17, wherein Ar¹ is any one of **a-bb**:

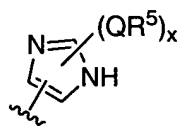
**a****b****c****d**



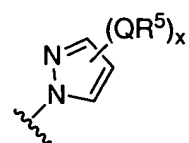
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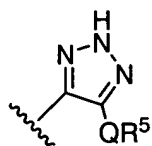
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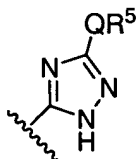
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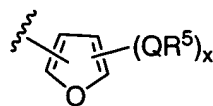
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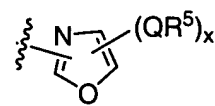
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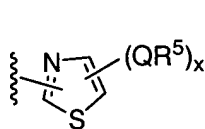
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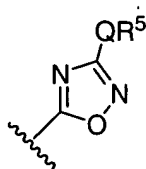
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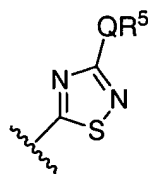
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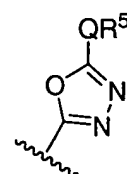
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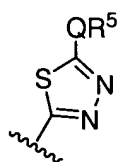
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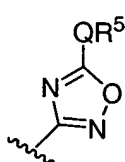
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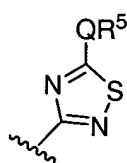
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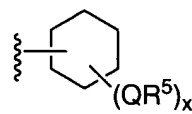
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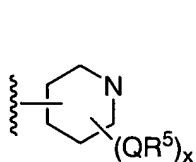
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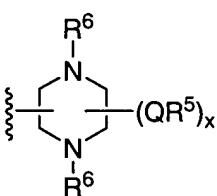
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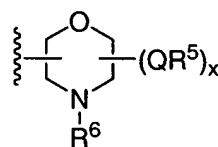
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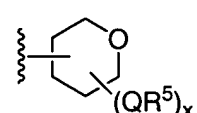
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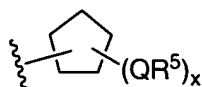
v



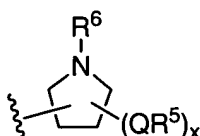
w



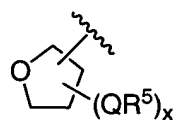
x



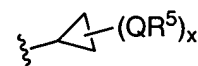
y



z



aa

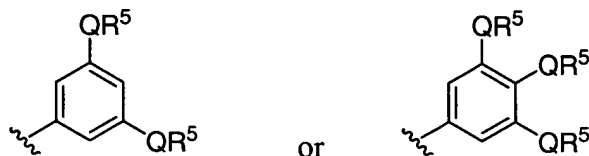


bb

wherein Q and R⁵ are as defined generally above and in subsets herein, and x is 0-5.

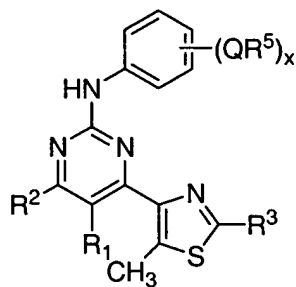
21. The compound of claim 17, wherein Ar¹ is phenyl, pyrimidinyl, or pyridyl.

22. The compound of claim 17, wherein Ar¹ is phenyl and is substituted with two (x = 2) or three (x = 3) occurrences of Q-R⁵ and Ar¹ is:

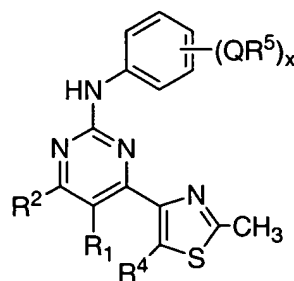


wherein each occurrence of QR⁵ is independently CH₂halogen, halogen, CH₂CN, CN, CH₂CO₂R', CO₂R', CH₂COR', COR', R', CH₂NO₂, NO₂, CH₂OR', OR', CH₂SR', SR', haloalkyl, CH₂SO₂N(R')₂, SO₂N(R')₂, CH₂N(R')₂, N(R')₂, NHCOR', CH₂NHCOR', CH₂PO(OR')₂, PO(OR')₂.

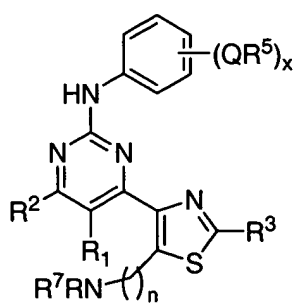
23. The compound of claim 17, wherein Ar¹ is optionally substituted phenyl and compounds have one of formulas **II-A-i**, **II-A-ii**, **II-B-i**, **II-B-ii**, **II-C-i**, **II-C-ii**, **II-D-i**, or **II-E-i**:



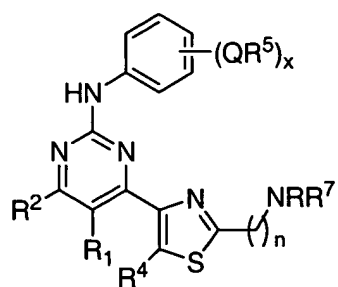
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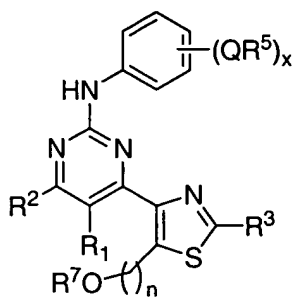
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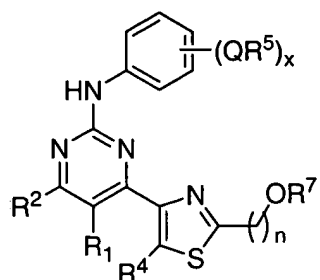
II-B-i



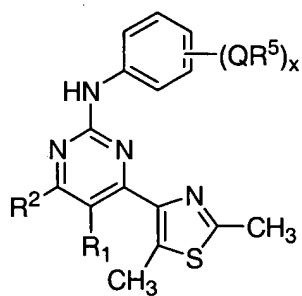
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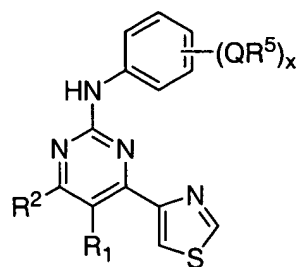
II-C-i



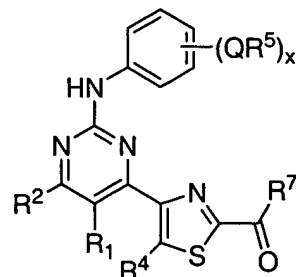
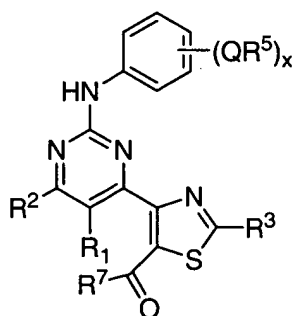
II-C-ii



II-D-i



II-E-i



II-F-i**II-F-ii**

where x is 0-5.

24. The compound of claim 23, wherein each occurrence of Q is independently a bond or is an optionally substituted C₁-C₄ alkylidene chain wherein up to two non-adjacent methylene units of Q are optionally replaced by CO, CO₂, CONR, OCONR, NRCO, NRCO₂, NRSO₂, SO₂NR, O, S, or NR; and each occurrence of R⁵ is independently selected from R', halogen, NO₂, CN, OR', SR', N(R')₂, NR'C(O)R', NR'C(O)N(R')₂, NR'CO₂R', C(O)R', CO₂R', OC(O)R', C(O)N(R')₂, OC(O)N(R')₂, SOR', SO₂R', SO₂N(R')₂, NR'SO₂R', NR'SO₂N(R')₂, PO(OR')₂, C(O)C(O)R', or C(O)CH₂C(O)R', and x is 0, 1, 2, or 3.

25. The compound of claim 23, wherein each occurrence of Q-R⁵ is independently CH₂halogen, halogen, CH₂CN, CN, CH₂CO₂R', CO₂R', CH₂COR', COR', R', CH₂NO₂, NO₂, CH₂OR', OR', CH₂SR', SR', haloalkyl, CH₂SO₂N(R')₂, SO₂N(R')₂, CH₂N(R')₂, N(R')₂, NHCOR', CH₂NHCOR', CH₂PO(OR')₂, PO(OR')₂, or two adjacent occurrences of Q-R⁵, taken together with the atoms to which they are bound, form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5-8-membered ring having 0-3 heteroatoms selected from nitrogen, oxygen, or sulfur.

26. The compound of claim 23, wherein each occurrence of Q-R⁵ is independently fluoro, iodo, chloro, bromo, COCH₃, CO₂CH₃, C₁₋₄alkyl, NH₂, CH₂NH₂, NHMe, CH₂NHMe, N(Me)₂, CH₂N(Me)₂, N(Et)₂, CH₂N(Et)₂, NH(phenyl), CO(C₁₋₄alkyl), CH₂CO(C₁₋₄alkyl), NHCO(C₁₋₄alkyl), CH₂NHCO(C₁₋₄alkyl), CN, CH₂CN, OH, C₁₋₄alkoxy, optionally substituted benzyloxy, optionally substituted phenoxy, CF₃, SO₂NH₂, SO₂NHMe, optionally substituted SO₂(phenyl), SO₂(C₁₋₄alkyl), CONH₂, CH₂PO(OR')₂, or an optionally substituted group selected from a saturated, partially unsaturated, or fully unsaturated 5- or 6-membered ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur.

27. The compound of claim 23, wherein R^1 and R^2 are each independently hydrogen, $N(R)_2$, SR, OR, or TR, or R^1 and R^2 , taken together form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5-membered ring having 0-2 heteroatoms independently selected from N, O, or S.

28. The compound of claim 27, wherein R^1 and R^2 are each independently hydrogen, OH, CH_3 , CH_2CH_3 , OCH_3 , CH_2OH , CH_2OCH_3 , CH_2NH_2 , CH_2NHCH_3 , NH_2 , or CH_2NH_2 , or R^1 and R^2 , taken together, form a fused optionally substituted pyrrolyl, pyrazolyl, or imidazolyl ring.

29. The compound of claim 23, wherein R^3 is $Z-R^7$, wherein Z is a bond or is an optionally substituted C_{0-4} alkylidene chain wherein one methylene unit of Z is optionally replaced by O, NR, NRCO, $NRCO_2$, $NRSO_2$, CONR, C(O), C(O)O, and wherein R^7 is halogen, CN, $N(R')_2$, $NHCOR'$, or R' .

30. The compound of claim 23, wherein R^3 is $(CH_2)_n$ halogen, $(CH_2)_n$ CN, $(CH_2)_nOR^7$, $(CH_2)_nNRR^7$, $(CH_2)_nC(O)R^7$, $(CH_2)_nC(O)R^7$ $(CH_2)_nCH_3$, $(CH_2)_nC(O)NRR^7$, $(CH_2)_nSR^7$, wherein R^7 is $(CH_2)_mN(R')_2$, C_1 - C_4 alkyl, an optionally substituted 5- or 6-membered aryl, aralkyl, heteroaryl, or heteroaralkyl group, or R and R^7 , taken together with the nitrogen atom to which they are bound form an optionally substituted 3-8-membered saturated or partially unsaturated ring having 1-3 heteroatoms selected from nitrogen, oxygen, or sulfur, n is 0 or 1, and m is 0 or 1.

31. The compound of claim 23, wherein R^4 is $Z-R^7$, wherein Z is a bond or is an optionally substituted C_{0-4} alkylidene chain wherein one methylene unit of Z is optionally replaced by O, NR, NRCO, $NRCO_2$, $NRSO_2$, CONR, C(O), C(O)O, and wherein R^7 is selected from halogen, CN, $N(R')_2$, $NHCOR'$, or R' .

32. The compound of claim 23, wherein R^4 is $(CH_2)_n$ halogen, $(CH_2)_n$ CN, $(CH_2)_nOR^7$, $(CH_2)_nNRR^7$, $(CH_2)_nC(O)R^7$, $(CH_2)_nC(O)R^7$ $(CH_2)_nCH_3$, $(CH_2)_nC(O)NRR^7$, $(CH_2)_nSR^7$, wherein R^7 is $(CH_2)_mN(R')_2$, C_1 - C_4 alkyl, an optionally substituted 5- or 6-membered aryl,

aralkyl, heteroaryl, or heteroaralkyl group, or R and R⁷, taken together with the nitrogen atom to which they are bound form an optionally substituted 3-8-membered saturated or partially unsaturated ring having 1-3 heteroatoms selected from nitrogen, oxygen, or sulfur, n is 0 or 1, and m is 0 or 1.

33. The compound of claim 23, wherein compounds have one of formulas **II-A-i**, **II-B-i**, **II-C-i**, or **II-F-i** and the compound variables are defined as:

a) x is 0, 1, or 2, and Q-R⁵ is CH₂halogen, halogen, CH₂CN, CN, CH₂CO₂R', CO₂R', CH₂COR', COR', R', CH₂NO₂, NO₂, CH₂OR', OR', CH₂SR', SR', haloalkyl, CH₂SO₂N(R')₂, SO₂N(R')₂, CH₂N(R')₂, N(R')₂, NHCOR', CH₂NHCOR', CH₂PO(OR')₂, PO(OR')₂, or Q-R⁵, taken together with the atoms to which they are bound, form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5-8-membered ring having 0-3 heteroatoms selected from nitrogen, oxygen, or sulfur;

b) R¹ and R² are each independently hydrogen, N(R)₂, SR, OR, or TR, or R¹ and R², taken together form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5-membered ring having 0-2 heteroatoms independently selected from N, O, or S; and

c) R³ is (CH₂)_nhalogen, (CH₂)_nCN, (CH₂)_nOR⁷, (CH₂)_nNRR⁷, (CH₂)_nC(O)R⁷, (CH₂)_nC(O)R⁷ (CH₂)_nCH₃, (CH₂)_nC(O)NRR⁷, (CH₂)_nSR⁷, wherein R⁷ is (CH₂)_mN(R')₂, C₁-C₄alkyl, an optionally substituted 5- or 6-membered aryl, aralkyl, heteroaryl, or heteroaralkyl group, or R and R⁷, taken together with the nitrogen atom to which they are bound form an optionally substituted 3-8-membered saturated or partially unsaturated ring having 1-3 heteroatoms selected from nitrogen, oxygen, or sulfur, n is 0 or 1, and m is 0 or 1.

34. The compound of claim 23, wherein compounds have one of formulas **II-A-ii**, **II-B-ii**, **II-C-ii**, or **II-F-ii** and one or more of the compound variables are defined as:

a) x is 0, 1, 2, or 3, and Q-R⁵ is CH₂halogen, halogen, CH₂CN, CN, CH₂CO₂R', CO₂R', CH₂COR', COR', R', CH₂NO₂, NO₂, CH₂OR', OR', CH₂SR', SR', haloalkyl, CH₂SO₂N(R')₂, SO₂N(R')₂, CH₂N(R')₂, N(R')₂, NHCOR', CH₂NHCOR', CH₂PO(OR')₂, PO(OR')₂, or Q-R⁵, taken together with the atoms to which they are bound, form an

optionally substituted saturated, partially unsaturated, or fully unsaturated 5-8-membered ring having 0-3 heteroatoms selected from nitrogen, oxygen, or sulfur;

b) R^1 and R^2 are each independently hydrogen, $N(R)_2$, SR, OR, or TR, or R^1 and R^2 , taken together form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5-membered ring having 0-2 heteroatoms independently selected from N, O, or S; and

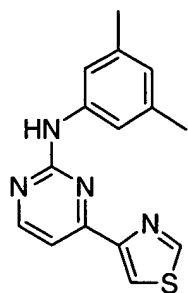
c) R^4 is $(CH_2)_n$ halogen, $(CH_2)_n$ CN, $(CH_2)_nOR^7$, $(CH_2)_nNRR^7$, $(CH_2)_nC(O)R^7$, $(CH_2)_nC(O)R^7(CH_2)_nCH_3$, $(CH_2)_nC(O)NRR^7$, $(CH_2)_nSR^7$, wherein R^7 is $(CH_2)_mN(R')_2$, C_1 - C_4 alkyl, an optionally substituted 5- or 6-membered aryl, aralkyl, heteroaryl, or heteroaralkyl group, or R and R^7 , taken together with the nitrogen atom to which they are bound form an optionally substituted 3-8-membered saturated or partially unsaturated ring having 1-3 heteroatoms selected from nitrogen, oxygen, or sulfur, n is 0 or 1, and m is 0 or 1.

35. The compound of claim 23, wherein compounds have formula **II-F-i**, and one or more of the compound variables are defined as:

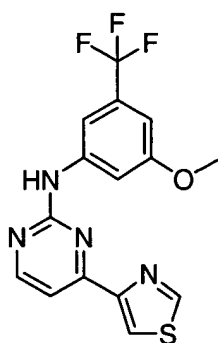
a) x is 0, 1, 2, or 3, and $Q-R^5$ is CH_2 halogen, halogen, CH_2 CN, CN, CH_2CO_2R' , CO_2R' , CH_2COR' , COR' , R' , CH_2NO_2 , NO_2 , CH_2OR' , OR' , CH_2SR' , SR' , haloalkyl, $CH_2SO_2N(R')_2$, $SO_2N(R')_2$, $CH_2N(R')_2$, $N(R')_2$, $NHCO_2R'$, CH_2NHCO_2R' , $CH_2PO(OR')_2$, $PO(OR')_2$, or $Q-R^5$, taken together with the atoms to which they are bound, form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5-8-membered ring having 0-3 heteroatoms selected from nitrogen, oxygen, or sulfur; and

b) R^1 and R^2 are each independently hydrogen, $N(R)_2$, SR, OR, or TR, or R^1 and R^2 , taken together form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5-membered ring having 0-2 heteroatoms independently selected from N, O, or S.

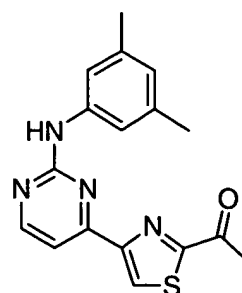
36. The compound of claim 1, selected from:



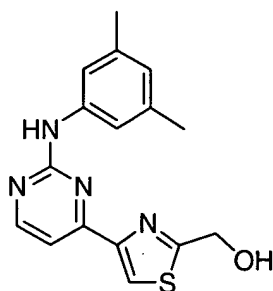
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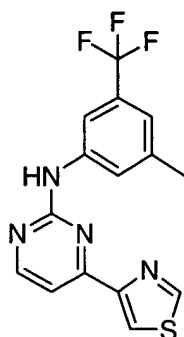
I-2



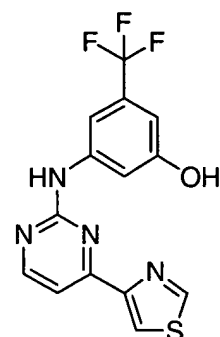
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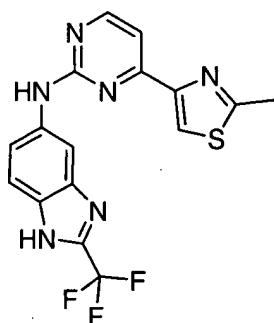
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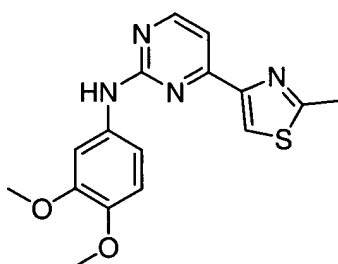
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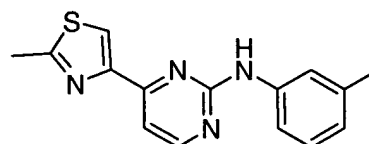
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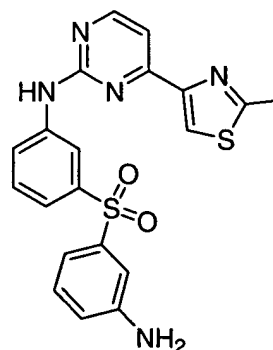
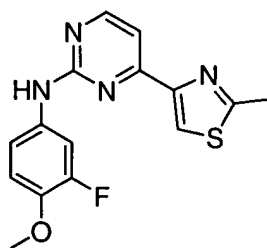
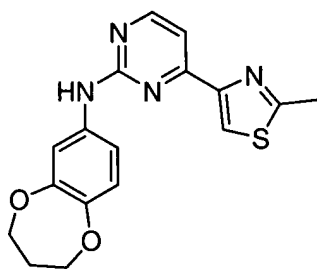
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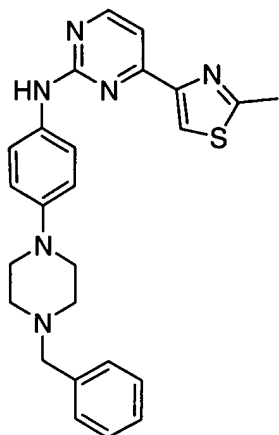
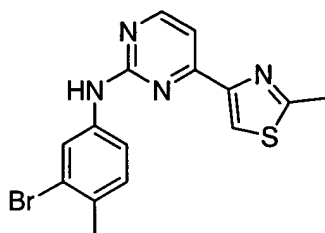
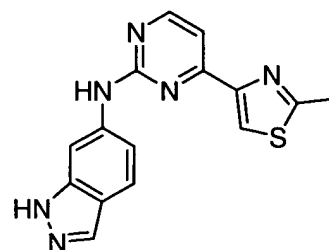
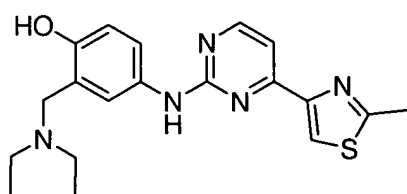
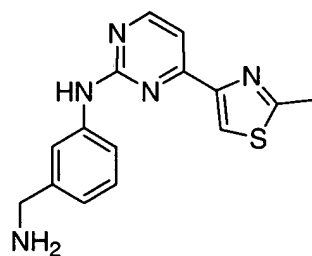
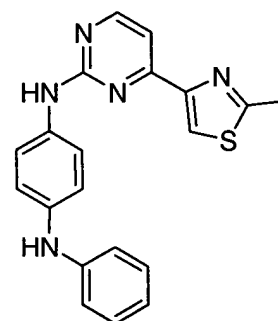
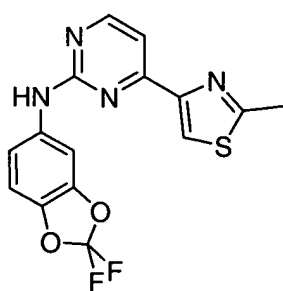
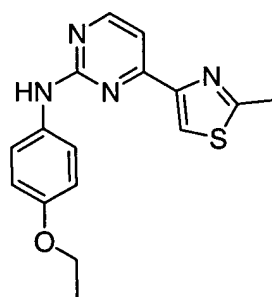
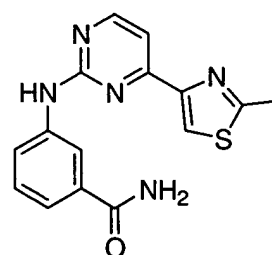


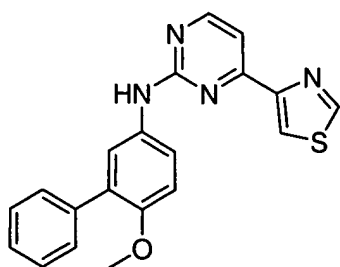
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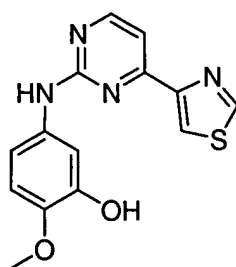
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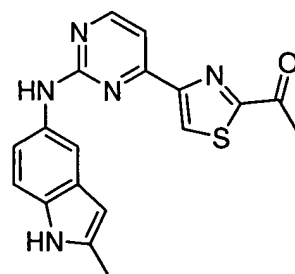
I-10**I-13****I-11****I-14****I-12****I-15****I-16****I-17****I-18****I-19****I-20****I-21**



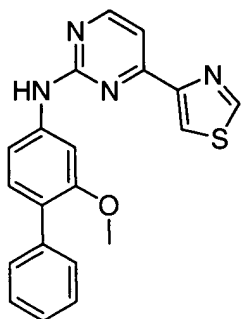
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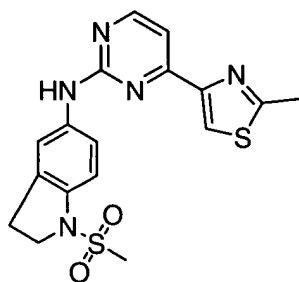
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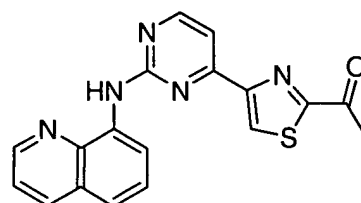
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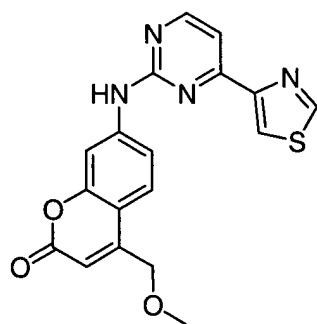
I-25



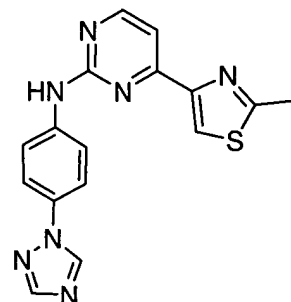
I-26



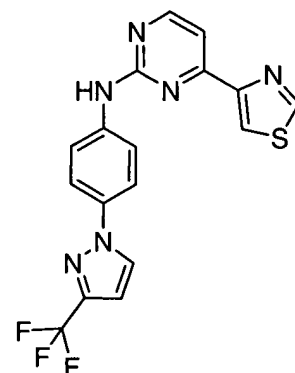
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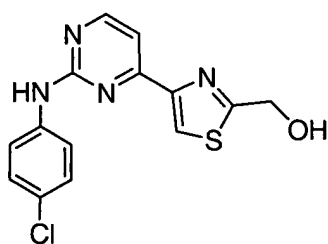
I-28



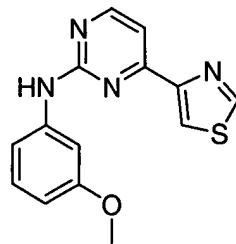
I-29



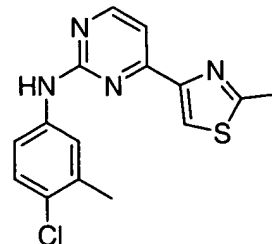
I-30



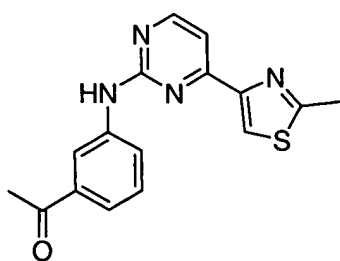
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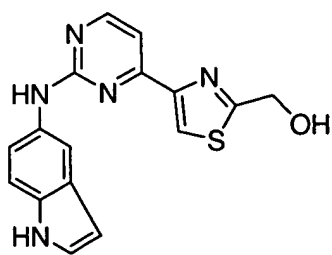
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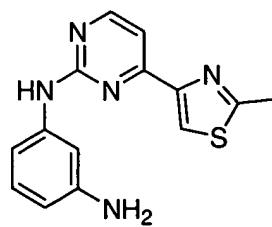
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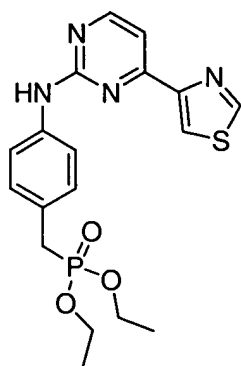
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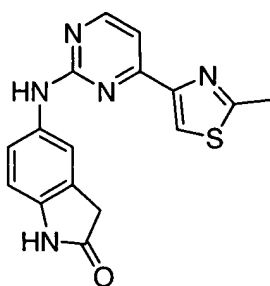
I-35



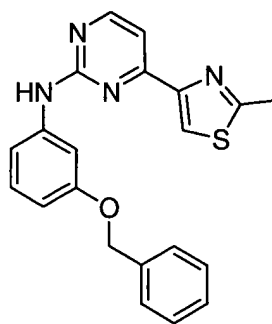
I-36



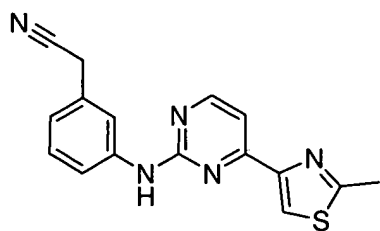
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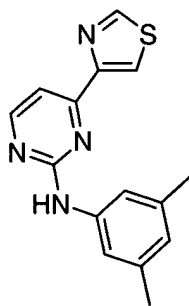
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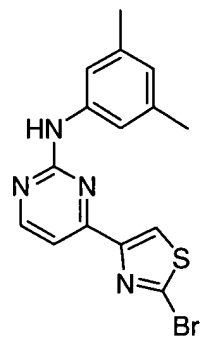
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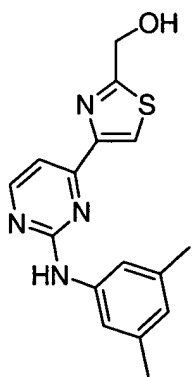
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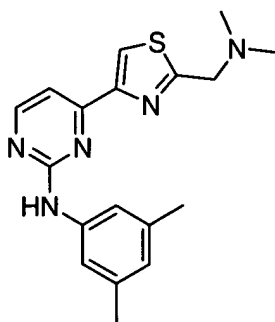
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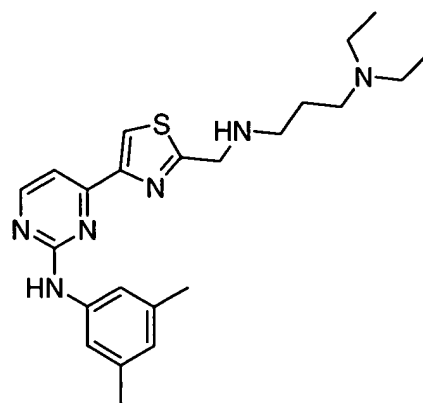
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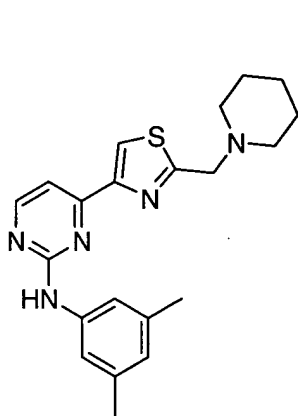
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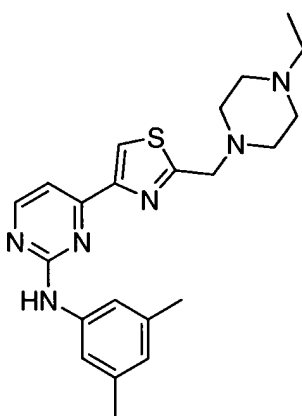
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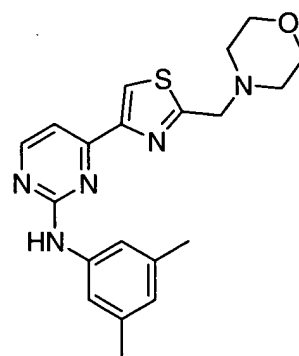
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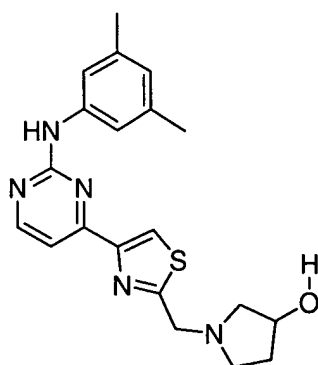
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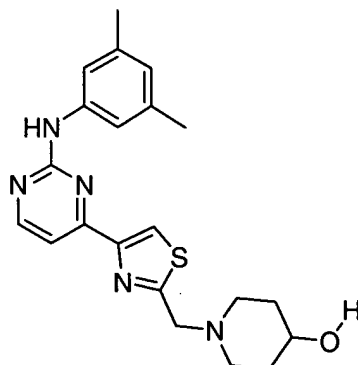
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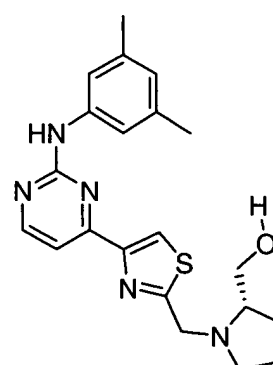
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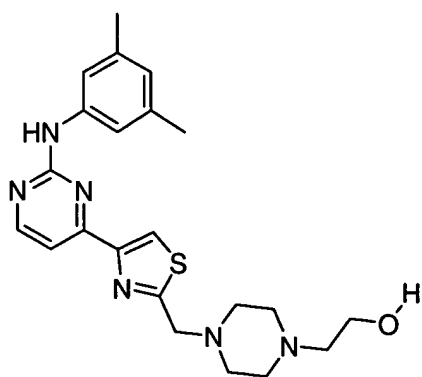
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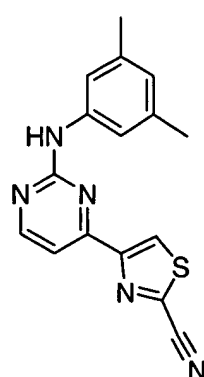
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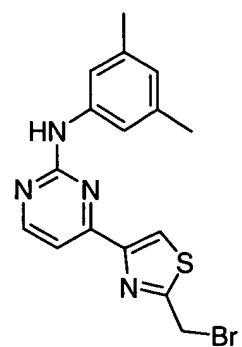
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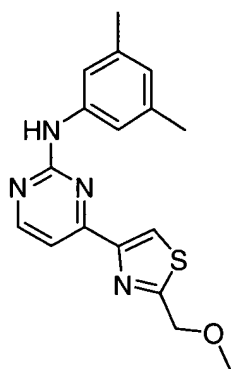
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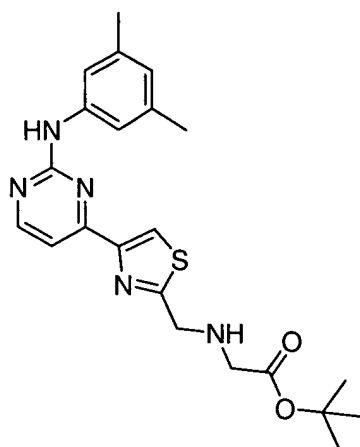
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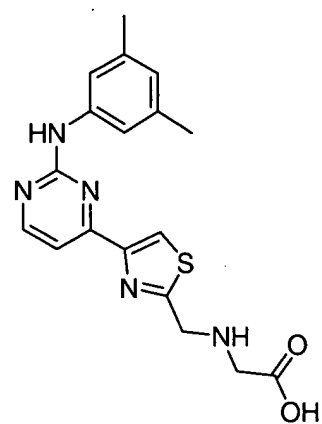
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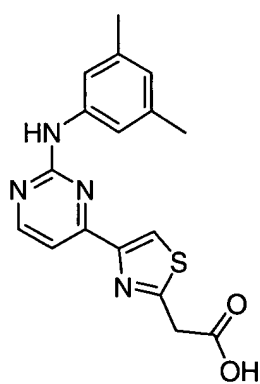
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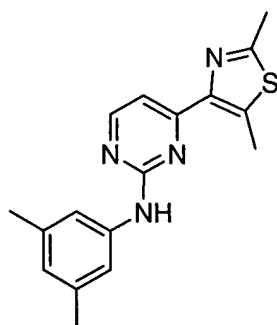
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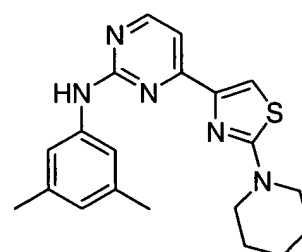
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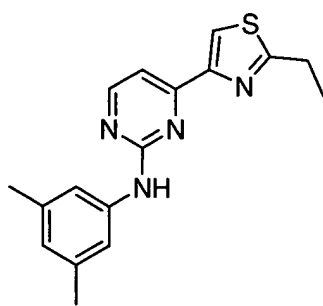
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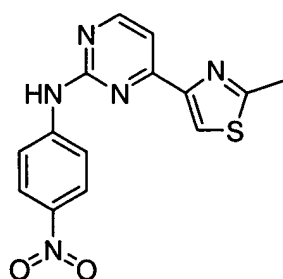
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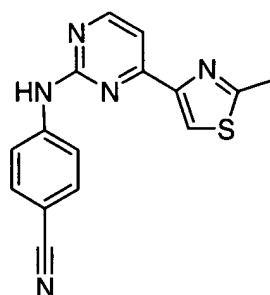
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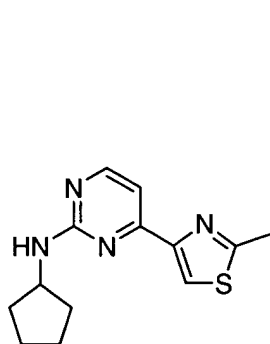
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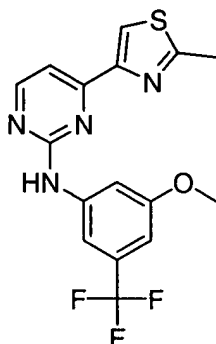
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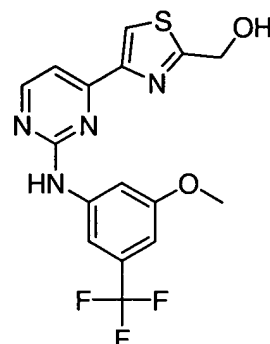
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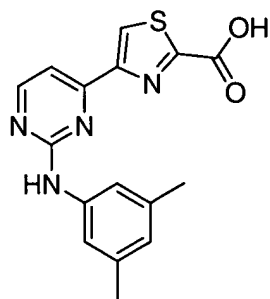
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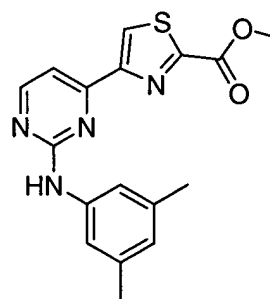
I-65



I-66



I-67



I-68

37. A composition comprising a compound of claim 1, and a pharmaceutically acceptable carrier, adjuvant, or vehicle.

38. The composition of claim 37, wherein the compound is in an amount to detectably inhibit SYK, or ZAP-70 protein kinase activity.

39. The composition of claim 37, additionally comprising a therapeutic agent selected from an anti-inflammatory agent, an anti-proliferative agent, an immunomodulatory or immunosuppressive agent, or an agent for treating immunodeficiency disorders.

40. A method of inhibiting SYK or ZAP-70 kinase activity in:

(a) a patient; or

(b) a biological sample;

which method comprises administering to said patient, or contacting said biological sample with:

a) a composition of claim 37; or

b) a compound of claim 1.

41. A method of treating or lessening the severity of treatment or lessening the severity of an immunodeficiency disorder, inflammatory disease, allergic disease, autoimmune disease, proliferative disorder, immunologically-mediated disease, or respiratory disorder, comprising the step of administering to said patient:

a) a composition of claim 37; or

b) a compound of claim 1.

42. The method according to claim 41, comprising the additional step of administering to said patient an additional therapeutic agent selected from an anti-inflammatory agent, an anti-proliferative agent, an immunomodulatory or immunosuppressive agent, or an agent for treating immunodeficiency disorders, wherein:

said additional therapeutic agent is appropriate for the disease being treated; and

said additional therapeutic agent is administered together with said composition as a single dosage form or separately from said composition as part of a multiple dosage form.

43. The method according to claim 41, wherein the disease is an immune disorder.

44. The method according to claim 41, wherein the disease is asthma.